

Solar System Model

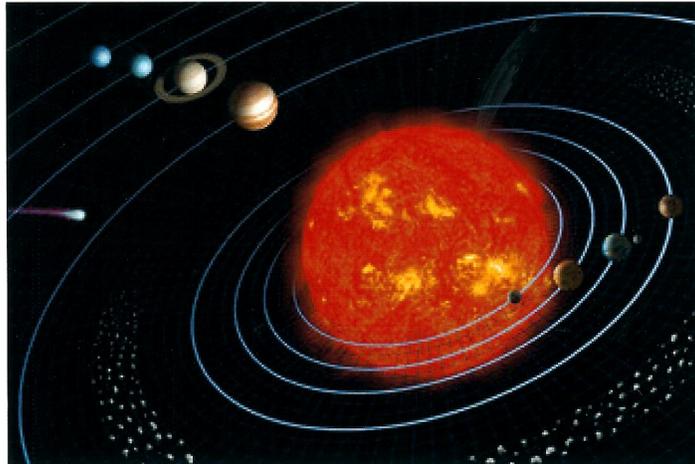
This activity includes four pages. It is an easy-to-make scale model of our solar system. The scale is **1 inch = 8,000 miles**. This scale model only shows the diameters of the planets. A planet's diameter measures the length from one side, through the center, to the other side.

You Will Need

pages 2-4 of this activity, drawing paper, scissors, thread, tape, string

What to Do

1. If the planets do not print in color, use white paper and color the planets or use eight different paper colors.



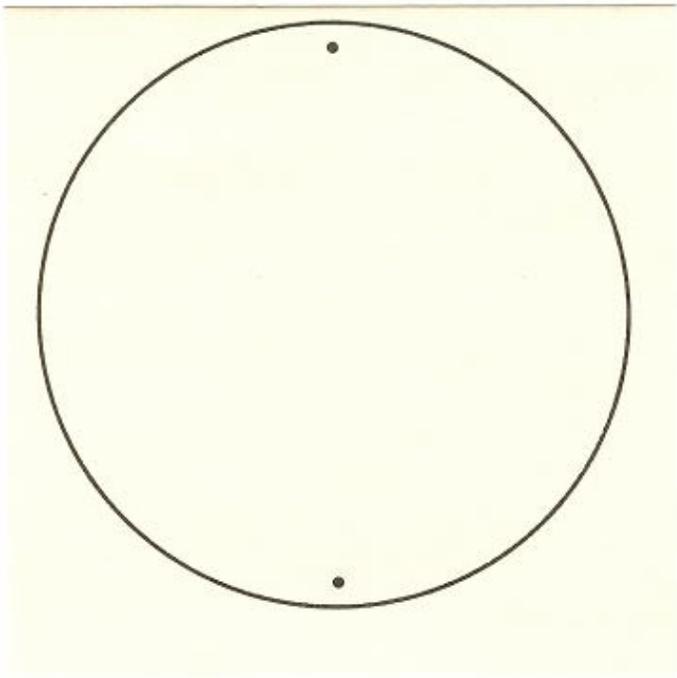
NASA Illustration

2. Copy page 2 showing six planets. Cut out the planets and their names. Page 3 shows $\frac{1}{2}$ of Saturn. Cut out this piece and then use this piece to trace and cut another half. Tape the two halves together. Page 4 shows $\frac{1}{4}$ of Jupiter. Cut out this piece. Trace and then cut 3 more pieces. Tape the 4 pieces together.

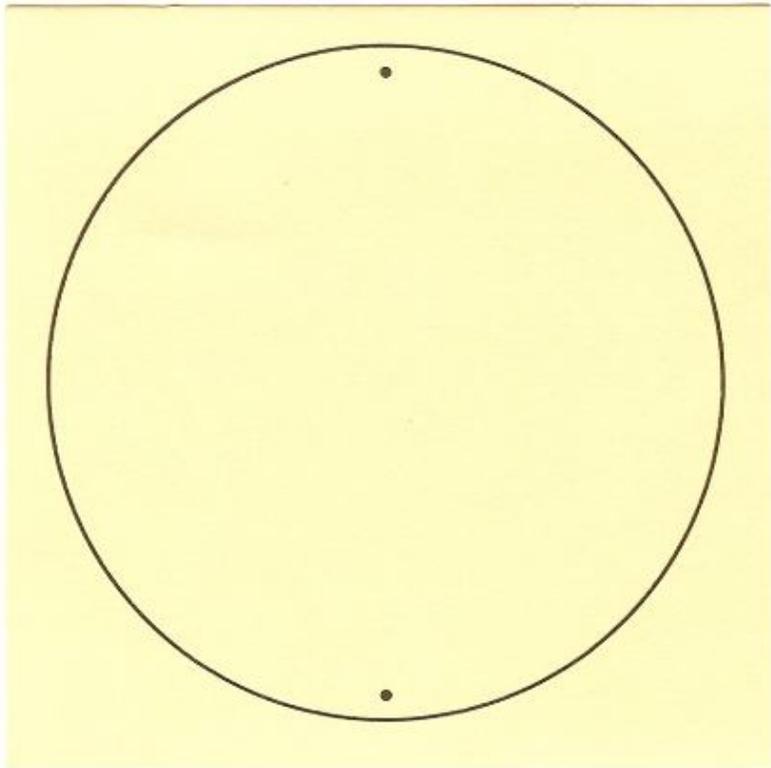
3. Make small holes at each of the dots on the planets. Tie thread through one hole to hang the planets. From the other hole, hang the planet's name. Tape or tie a piece of string from one corner of a room to another corner. Hang the planets in order: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. Where is Pluto? In 2006, astronomers decided that Pluto would no longer be considered a planet.

Distance Between Planets

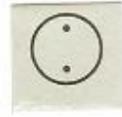
The scale you used shows planet diameters. This same scale can't realistically show distance between planets. Why? Let's imagine that your school or your house is the Sun. To show distances from the Sun, you would have to hang your model planets at the following distances away from your house or school: Mercury, 375 feet; Venus, 700 feet, Earth, 980 feet, Mars, 1,470 feet, Jupiter, about 1 mile; Saturn, $1\frac{3}{4}$ miles, Uranus, $3\frac{1}{2}$ miles, and Neptune, $5\frac{1}{2}$ miles. Does this help you understand how enormous distances are in outer space?



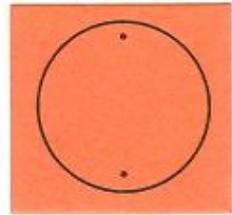
NEPTUNE



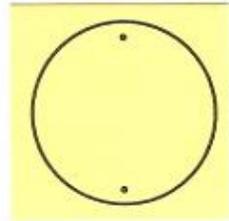
URANUS



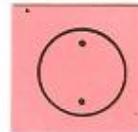
MERCURY



VENUS

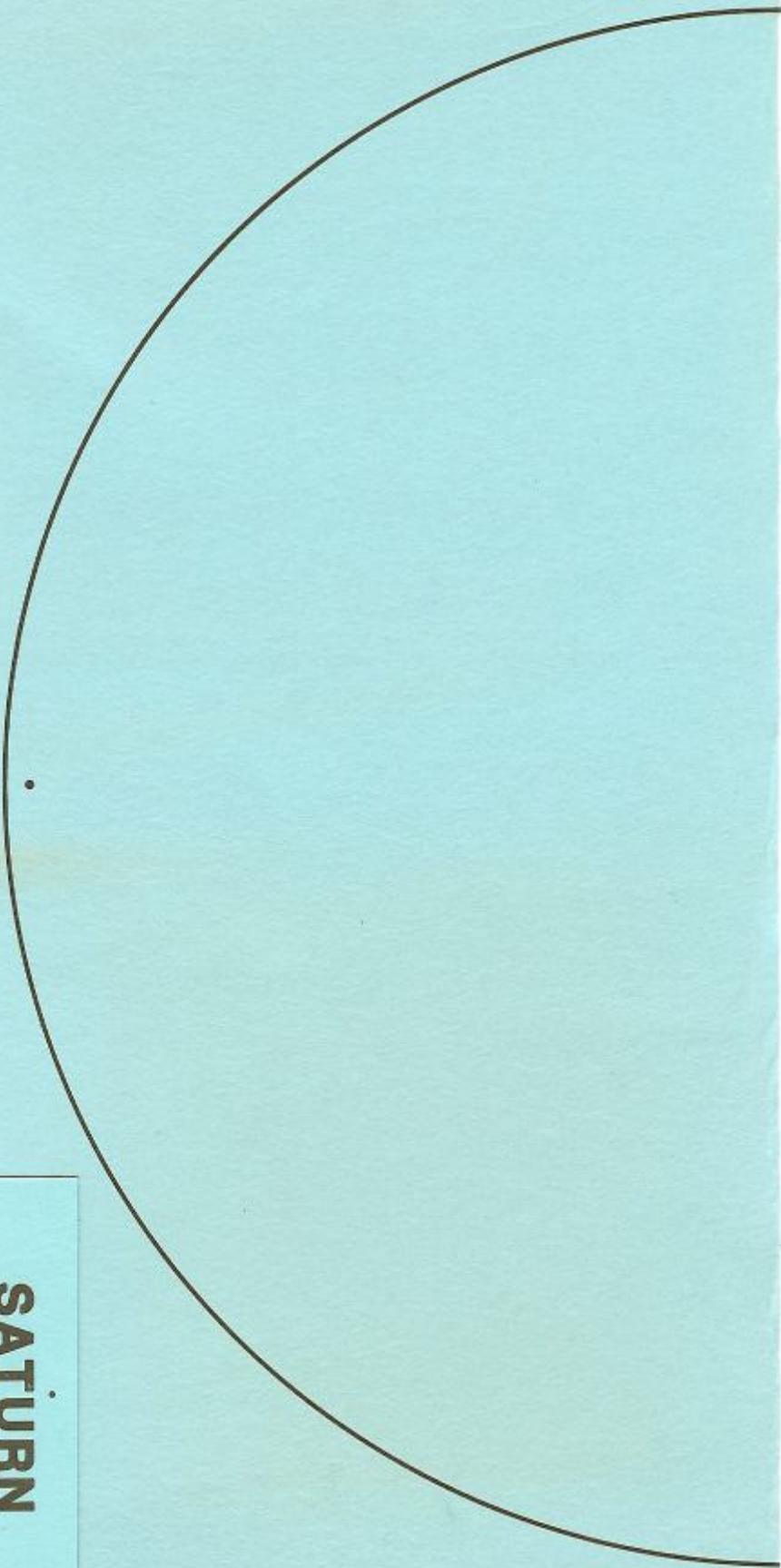


EARTH



MARS

SATURN



JUPITER

